THE INFLUENCE OF THE NEW SUPPLIES OF GOLD.

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THE low point in gold production, since the discovery in California, was touched about 1885, before the opening of the Transvaal field, and before the decline in silver had gone so far as to divert enterprise from silver mining to gold mining. For the five years from 1881 to 1885, inclusive, the average annual production of gold in the world was about $100,000,000. For the year 1890, the world's production was about $118,000,000. The output of the United States for 1890 was $32,000,000; for 1900, it was $78,000,000. The output of Australia for 1890 was $30,000,000; for 1900 it was $75,000,000. The output of South Africa for 1890 was about $8,000,000; in 1900, but for the war, it would have been over $100,000,000. With the restoration of peace in South Africa and the resumption of mining operations there, the yield of gold in the world may be expected to speedily reach $400,000,000 a year. Indeed, it is likely that the production of new gold from the mines in the next twelve years will equal the entire stock of gold held for monetary use in the world at the present moment.

The figures are startling, and even suggest the possibility of a new disturbance of values. Some very eminent geologists are now predicting that the flood has only begun, and some economists of great repute are already saying that the coming economic problem is: What shall be done with the new gold? Certain it is that the new supplies will be an important factor in business conditions in the next ten years.

When the South African War is finally ended, the mines that were producing at the rate of $100,000,000 a year at the time the war broke out will be speedily reopened; and, as the field is very

regular and well-defined, the output will probably be increased. The Cripple Creek district of the United States, Alaska and British Columbia all give assurance of increased production, to say nothing of many other promising districts in this country. In great degree, the new output is due to discoveries which have lowered the cost of treating ores and make deposits of low grade productive, which formerly could not be treated with profit. There are problems of this character yet to be worked out, and it is possible that production may be largely increased from known fields which up to this time have not been available. The yield from placers in this country, at present, is comparatively small; but great results are predicted from these deposits in the future by those who have confidence in the dredges and other mechanical devices which have been invented for the working of such properties. On the other hand, some of the most skillful and experienced mining engineers are of the opinion that the yield from river beds and placers will not be an important factor in the product for at least many years to come.

Without speculating upon new sources of supply, such as placers and ores of a grade not yet available, it is apparent that the reappearance of South Africa as a regular shipper to London and to the Continent of Europe at the rate of $2,000,000 per week will mean a powerful reinforcement of the money supply, and will exert an influence upon speculation and enterprise that will be felt in every market of the world and react upon every industry. Those who are calculating upon the time when the present era of confidence and enterprise will exhaust itself must take account of the stimulus which will be due to this circumstance and of the steady accessions of new supplies of gold for an indefinite period.

There is no more interesting subject for speculation or studious inquiry than the effect of this golden stream upon the markets, upon all the varied relations of individuals and classes, and upon the social life of the people. In so far as an enlargement of the money stock, with the expansion of credits which accompanies it, furnishes support to growing industries and promotes a natural and orderly development of the world's resources, it is a good thing. But when every man is at work, when all the productive forces of society are in full action, you cannot make the world richer by pouring money into it. You reach the point then where addition means dilution, where the new supply can find employ-

ment only by a decrease in the value of the old stock. When this occurs, all business relations based upon terms of money are disturbed; speculation, instead of industry, is promoted; economic waste and adventure run riot, and end in a collapse that disorganizes the whole industrial system. There are cities in the Mississippi Valley that have not yet covered the land that was laid out and sold as town lots in 1857, when the new gold from California and excessive issues of unregulated bank paper stimulated a bubble-like prosperity.

Additions to the money supply find their way first to the banks, and the immediate effect is to reduce the interest rate. A reduction in the rate of interest upon loans naturally increases the demand for and value of investments which yield a better return, and real estate, stocks and securities are thus forced to higher prices. When interest rates drop from six to four per cent., a security that is deemed safe to pay six per cent. rises from par to 150. The advance stimulates purchases not merely for investment, but for selling again, and thus a period of speculation is inaugurated. Speculation, like a great fire, creates its own currents, and fans itself into uncontrollable fury.

There are only two periods in the history of the money metals that can be compared to the present, and to which we may look for any experimental light upon the subject. One of these was the period following the discovery of America and the exploitation of the treasures of Mexico and Peru, and the other the period following the discoveries in California and Australia. In the period of one hundred and fifty years following the discovery of America, the depreciation of the metals was about two-thirds of their value; that is, in 1650 a given amount of gold or silver bought only about one-third as much as in 1500. The result, naturally, was extreme confusion in affairs, great suffering among wage-earners, and embarrassment to all whose incomes were fixed in terms of money. The "poor laws" of Queen Elizabeth's time have been attributed to the distress caused by the rise of food without equivalent compensation to the wage-earning class. The quarrel of Charles the First with Parliament was, undoubtedly, aggravated by the necessity for new taxes to overcome the declining value of the revenues; and some historians hold that it was the deadly money question, the bane of politicians in all ages, that cost him his head.

Gold was discovered in California in 1848, and in Australia in 1851; and by 1852 these new fields were producing together over $100,000,000 a year. The first sign of the influx of the new gold into Europe was seen in the holdings of the Bank of England. They went up from about $40,000,000 in 1847 to $110,000,000 in June, 1853. To get this idle money into use, the bank reduced its regular rate of discount to two per cent.; and the market rate, for a considerable time, was reported at one and one-half per cent. The belief that the new supplies of gold would effect a permanent reduction of the rate of interest was so general that Mr. Gladstone, then Chancellor of the Exchequer, proposed in Parliament a scheme to refund the consols below three per cent., and fixed the rate on exchequer bills at one and one-half per cent.

The conclusion that an increase in the stock of money will permanently affect interest rates is, however, a mistake, due to a confusion of ideas. An increase in the stock of money will eventually find expression in a depreciation of the value of money, as compared with commodities; but interest is a payment in kind, and suffers the same depreciation in value as the principal, without any reduction in the rate. The interest rate depends upon the supply of capital, which may be quite different from the supply of money. The first effect of an increase in the money supply is, however, clearly upon the interest rate. The new stock swells the bank reserves, rates are put down to encourage borrowing, and eventually the new stock is absorbed either by the actual growth of industries, or by a rise of prices, when a larger amount finds employment in doing the same work.

This occurred in the early fifties. There was a general revival of trade and industry in England, and on the Continent, due less, probably, to the fact that more money was available than to the new energy imparted by heavy emigration to the gold fields, the expenditures connected therewith and the growth of trade with the United States, which was then on the high tide of prosperity. The famine, the hard times and the political troubles of 1848 had already started emigration and depleted the labor supply. Then came the revival of the shipping trade and the ship-building industry, a new demand for manufactures, and a revival of building operations in the cities. The price of building materials went up fifty per cent. in London, every idle man was in demand, wages were raised from twelve to twenty-five per cent., and a

general advance in all commodities took place. How much of this activity was due to the new gold, and how much to the natural reaction from the hard times that had lasted from 1846 to 1850, has always been in dispute. Then came the additional stimulus of war—the war in the Crimea—between Russia, on one side, and England, France, Turkey and Sardinia, on the other. This war drained heavy supplies of specie to the seat of operations in the East. England and France not only had to support their own troops there, but they bore, by means of subsidies, the expenses of their allies. And as the region in which the disbursements were made was poor in cash, and as commerce with it was small, bills of exchange were unavailable, and the remittances were made in coin. Under the two influences, expansion at home and the war exports, and another to be mentioned further on, the bank reserves rapidly disappeared. The rate of discount went up to five, six and seven per cent., and finally, in 1857, came the commercial crisis in Europe and America. The specie holdings in the bank of England were practically exhausted, the discount rate was ten per cent., and the Government had to intervene to save the bank.

Some of the most eminent statesmen and economists of the day, regarding the causes which brought about the collapse as temporary, still viewed the heavy gold output with concern. Chevalier, the French economist, published a book in which he carefully reviewed the situation and reached the conclusion that a heavy decline in the value of gold was inevitable, and he, therefore, recommended that France demonetize it. Holland, as early as 1854, took action on the safe side by demonetizing gold, and in 1857 Belgium followed her example.

But almost simultaneously with the war there sprang up a new demand for specie which proved to be the most potent of all influences in nullifying the effect of the new supplies, and that was the demand occasioned by the measures then begun for developing the resources of India.

In 1855-6 began the construction of the railway system of India, and immense sums of British capital were actually conveyed to India for that work. The result of furnishing cheap transportation from the interior to the coast was to increase greatly the exports of the country and pile up a larger trade balance in its favor, which had to be paid in silver. Prior to 1855, the exports of silver to India did not exceed $10,000,000 a year. In 1857,

they were about $100,000,000. This silver, to a great extent, was taken from the money stock of France and replaced with new gold from the mines. It was this sluice-way for silver to the East and the ability of France to take gold and give silver for it that prevented a further depreciation of gold at that time. For the eleven years, from 1855 to 1865, inclusive, the exports to India absorbed an amount of specie equal to eighty-five per cent. of the product of the new fields, which afforded a very satisfactory explanation for the failure of Mr. Chevalier's predictions. Chevalier's predictions might have come true, if something had not happened. The market value of predictions is greatly diminished by the fact that something usually does happen, and Chevalier's experience seems to suggest the wisdom of avoiding forecasts at this time. Notwithstanding the drain to India, Professor Stanley Jevons, writing in 1863 and reviewing the effect of the gold discoveries, reached the conclusion that gold had depreciated not less than nine per cent.—in his judgment nearer fifteen per cent., and perhaps more.

It seems reasonable to anticipate that what happened in the fifties will, to some extent, be repeated in this period. The times were never so favorable as now for the industrial development of the hitherto backward nations. In all the advanced countries, fully equipped with modern machinery, the production and accumulation of wealth is going on at a rate not only unprecedented, but almost beyond comparison with that of any other period. It is difficult in these countries to find opportunities to invest the annual savings of the people. This new capital is continually forced into occupations in which the returns are lower and lower as compared with the investments of the past, and the competition of this ever-coming stream forces down the return upon old investments as well. The result of this has been seen, first, in the destructive severity of competition, with a wasteful duplication of investments, a state that has not unfitly been called industrial anarchy; and, second, in the general organization of the industries which is the feature of to-day. But the same forces still exist, and they will continue to operate. There is no suppressing the competition of capital with capital, while new supplies continue to come on the market. Capital increases faster than population, and it follows that the only way in which the surplus can find employment is by competing with the existing stock.

There is but one avenue of relief for capital in all these wealthy countries, and that is emigration. We have heard a good deal about the struggle for life in densely populated countries, and the relief afforded by emigration. That never was truer of population than it is of capital. If all of the capital owned in New England had to find investment at home and in the service of the people of those States, what would the return be? If all the capital owned in England had to find investment at home and in the service of the people at home, what would the return be? And if we ask the same question as to Germany, France and the Netherlands, we come to realize the pressure there is upon capital in all of these countries to emigrate. The United States in the past has been the great field of investment for Europe, but home capital is now abundant in every part of this country and must either accept lower returns or look abroad for employment. Of course, this is not saying that there is no more employment for capital in this country, but simply that capital here must be subject to the law of diminishing returns. It will be like cultivating the hills of New England when the prairies of the West were open.

This condition furnishes an impulse behind the latter day efforts to secure colonies. It is to find new and virgin fields for development. Some of the richest portions of the globe lie with their stores of natural wealth untouched, ready to be poured upon the world. South America, Africa, Asia and Eastern Europe are great fields for enterprise and capital. Their resources are to be opened by the modern machinery of production; their populations, in some degree at least, are to be organized and incorporated in the modern industrial system. An obstacle to investment in these countries in the past has been the instability or hostility of their governments; but that obstacle is being rapidly removed either by the pervading influence of progress, as in the case of Japan, or by the overshadowing influence and control of the civilized powers, as is inevitable with China. The time has come when all conditions seem to unite for the establishment of order, the investment of capital and the organization of industry in the hitherto neglected countries. The transfer of capital is facilitated and stimulated by a plentitude of money, the most liquid form of capital; and the progress of these new countries will create new channels which may be expected to draw and hold a large propor-

tion of the new supply. The foreign trade of Japan is eight times as large as it was twenty years ago; and in the last half of that period the scale of living expenditures, wages and commercial transactions generally has risen one hundred per cent. The loans and discounts of the banks of Japan have quadrupled in the last eight years. All of that means, of necessity, more money held in circulation and more in the reserves and hoards. Whenever a country enters fairly into the community of nations, and becomes an open field for investment, the industrial and financial conditions tend, more or less rapidly, to approximate those in other countries. And so, in the spread of industrial activity and the overflow of capital from the fields in which it has been pent up, we may expect to see something of a levelling of monetary stocks.

There is a great difference in the stocks of money held by even the countries of Western and Eastern Europe. Belgium and the Netherlands use about $24 *per capita;* Germany, over $20 *per capita;* Russia, less than $7 *per capita;* Roumania, Bulgaria and Turkey, some $3 or $4 *per capita;* and even Italy and Austria-Hungary, less than $10 *per capita.* These figures reveal the poverty, the low industrial development, the incomplete equipment of the populations in Eastern Europe.

Japan is making every effort to attract foreign capital; and, if she succeeds, she will absorb more money. Her present stock is between $3 and $4 per head. What China will require, when her industrious millions are equipped with machinery, we can only vaguely conjecture. Her present monetary stock is less than $2 per head.

At first thought, the new demand would seem likely to be for silver rather than gold, as silver is the natural currency of countries in which wages are low and transactions small in amount. There cannot be much use of gold for current transactions in any country where a five-dollar coin more than covers the average monthly wage. But the experience of Japan demonstrates how rapidly the scale of transactions rises, when a country has felt the stimulus of modern industrial life. Russia has recently put a large amount of gold into circulation. Gold will be the standard coin everywhere, and the money of reserves and hoards.

If the new supplies should at first be wholly taken up in the circulation of the principal commercial countries, and a general rise in prices is forced, that fact in itself will add to the induce-

ments to develop the backward countries, where the costs of production remain low. Again, if the depreciation of gold becomes important, another influence will be felt, and that is the increased cost of mining. It will tend to discourage and check mining investments, as has been the case with silver in the last eight years. Professor Jevons in 1863 calculated that the depreciation of gold could not go beyond thirty per cent., for the reason that the loss in value would automatically diminish production. A very large proportion of the new yield is from low grade ores, the entire product from the Transvaal being from rock which yields only about ten dollars a ton. It would seem, therefore, that any depreciation of the metal as compared with the actual costs of production, would affect the output more widely now than at any time in the past. Upon this, as upon other phases of the subject, however, it is impossible to speak with any assurance, for the efforts of producers to overcome adverse conditions often yield extraordinary results.

The whole subject is, manifestly, one for speculation rather than calculation, so many and varied are the contingencies that will influence the final outcome. Speaking broadly, it seems safe to say that present conditions and probabilities favor the owner of real estate, fixed property and commodities, as against the owner of money and securities which yield a fixed return, or the salaried and wage-earning class. That there are corrective, compensating and reactionary influences goes without saying.

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